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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Richard Sims

Appln. No: 10/043,775      Examiner: Unassigned

Filed: January 10, 2002      Group: 2611

Title: "Method And System For Adaptive Equalization for Receivers In A Wide-Band Satellite Communications System"

**SUBMISSION OF FORMAL DRAWINGS**

Assistant Commissioner for Patents  
Washington, D.C. 20231

March 11, 2002

Dear Sir:

Submitted herewith are nine (9) sheets of formal drawings (Figs. 1 through 14). Please substitute these formal drawings for the drawings presently on file in this case.

If any fee is due in connection with the filing of this paper, please charge such fee to our Deposit Account No. 50-0383.

Date: 03-11-02

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, DC 20231 on March 11, 2002.

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**FIG. 1**

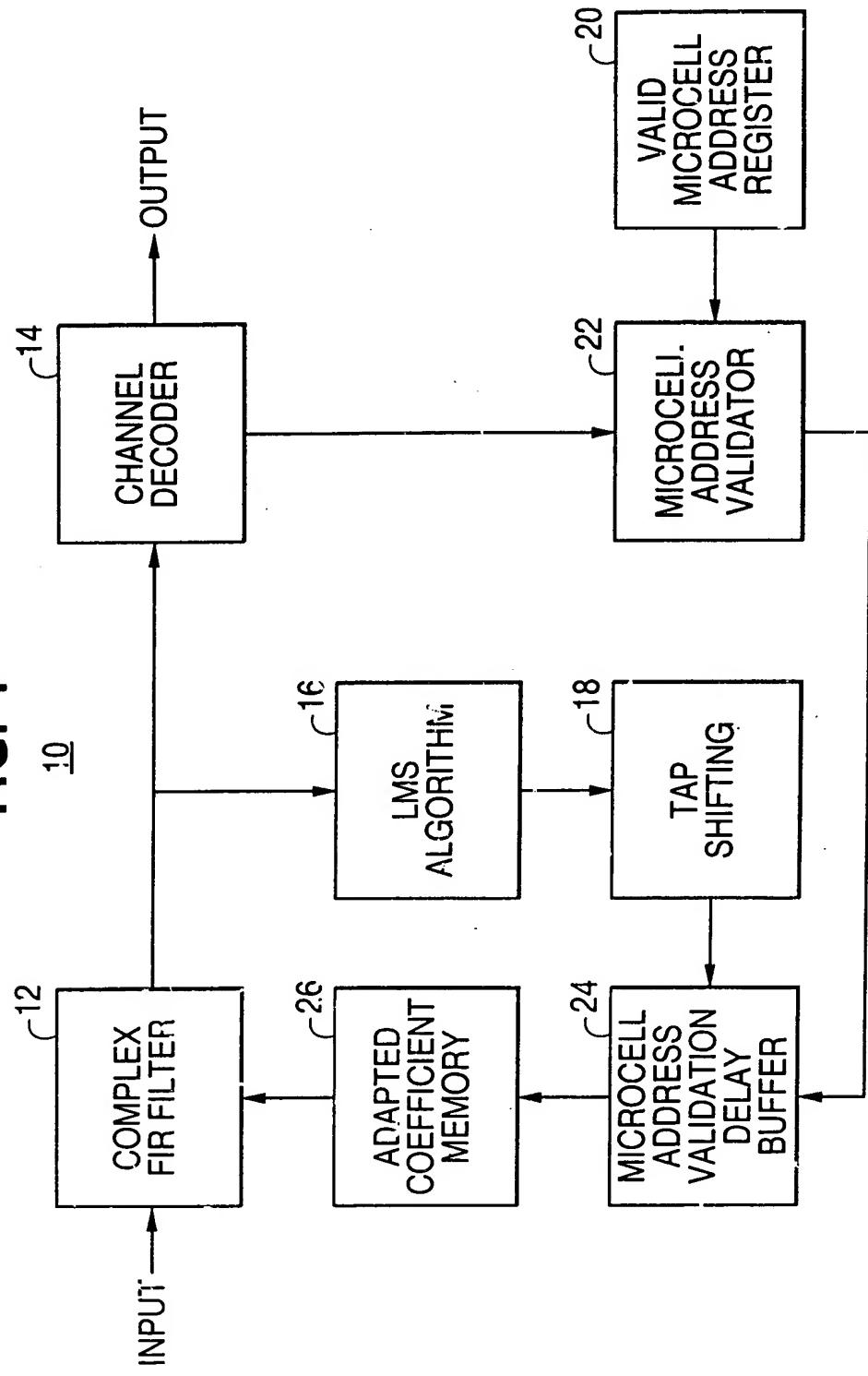
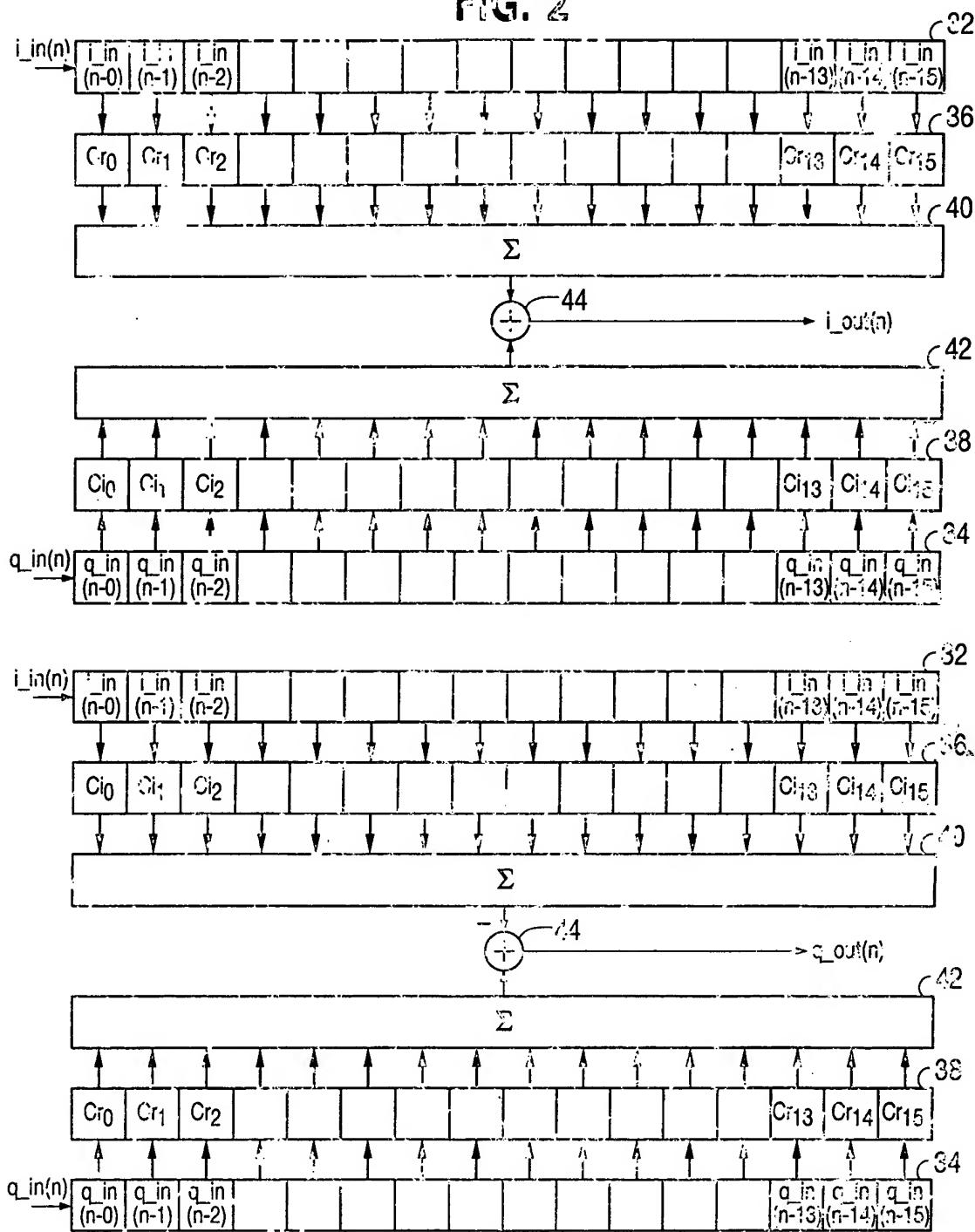


FIG. 2



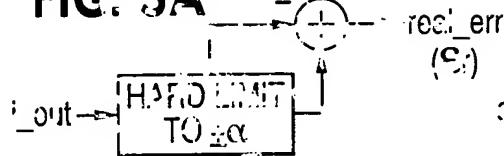
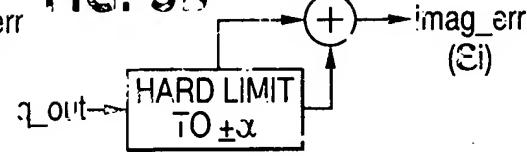
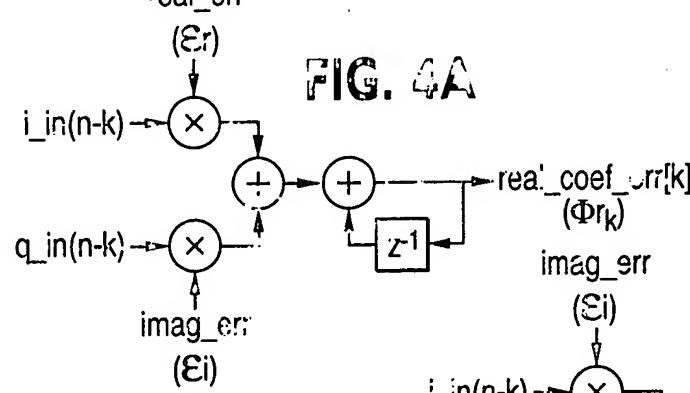
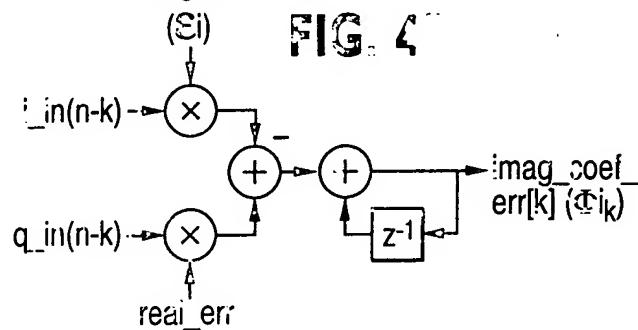
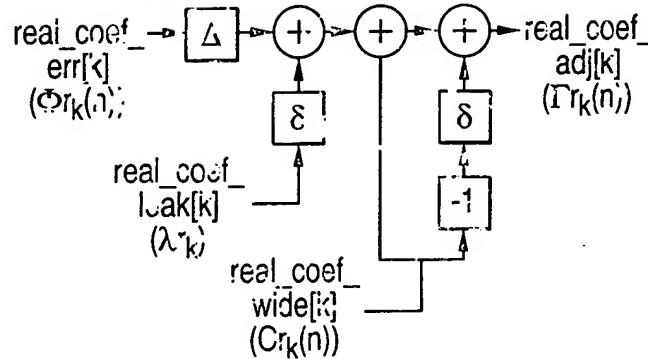
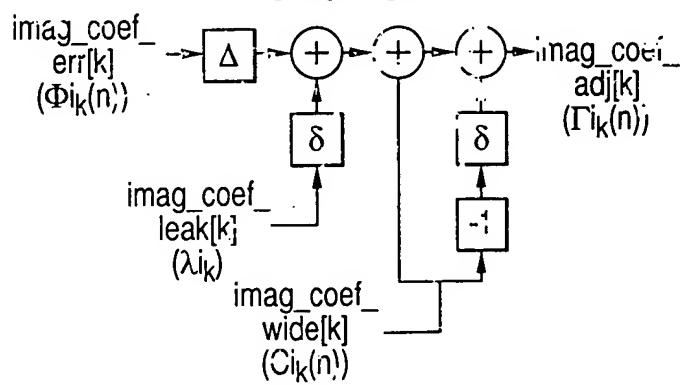
**FIG. 3A****FIG. 3B****FIG. 4A****FIG. 4****FIG. 5A****FIG. 5B**

FIG. 6

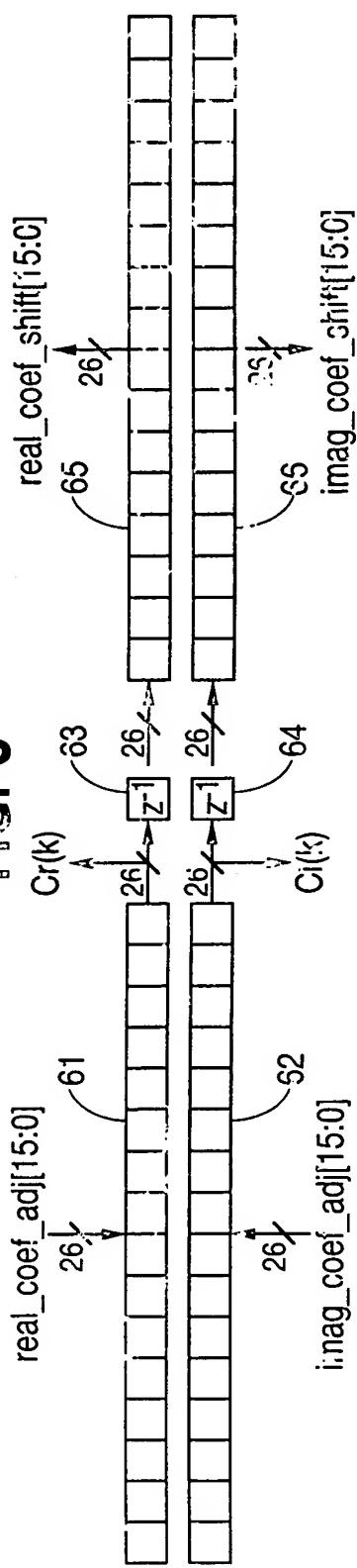


FIG. 8

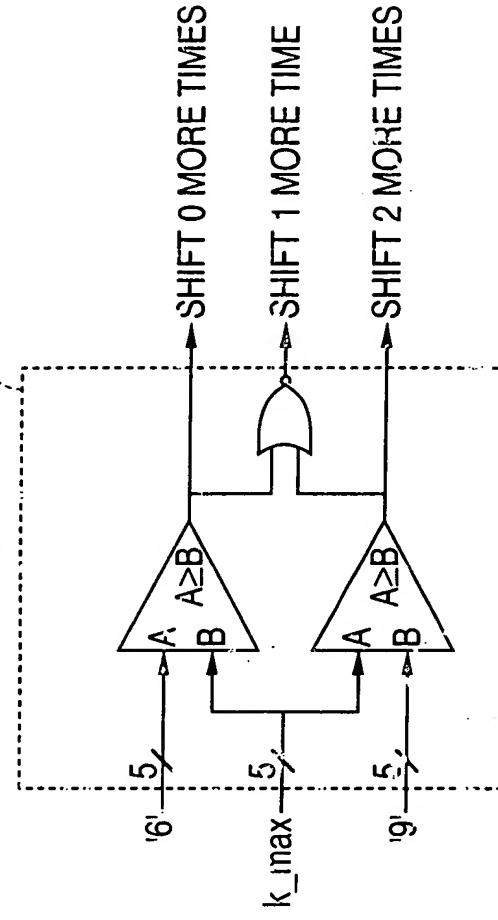
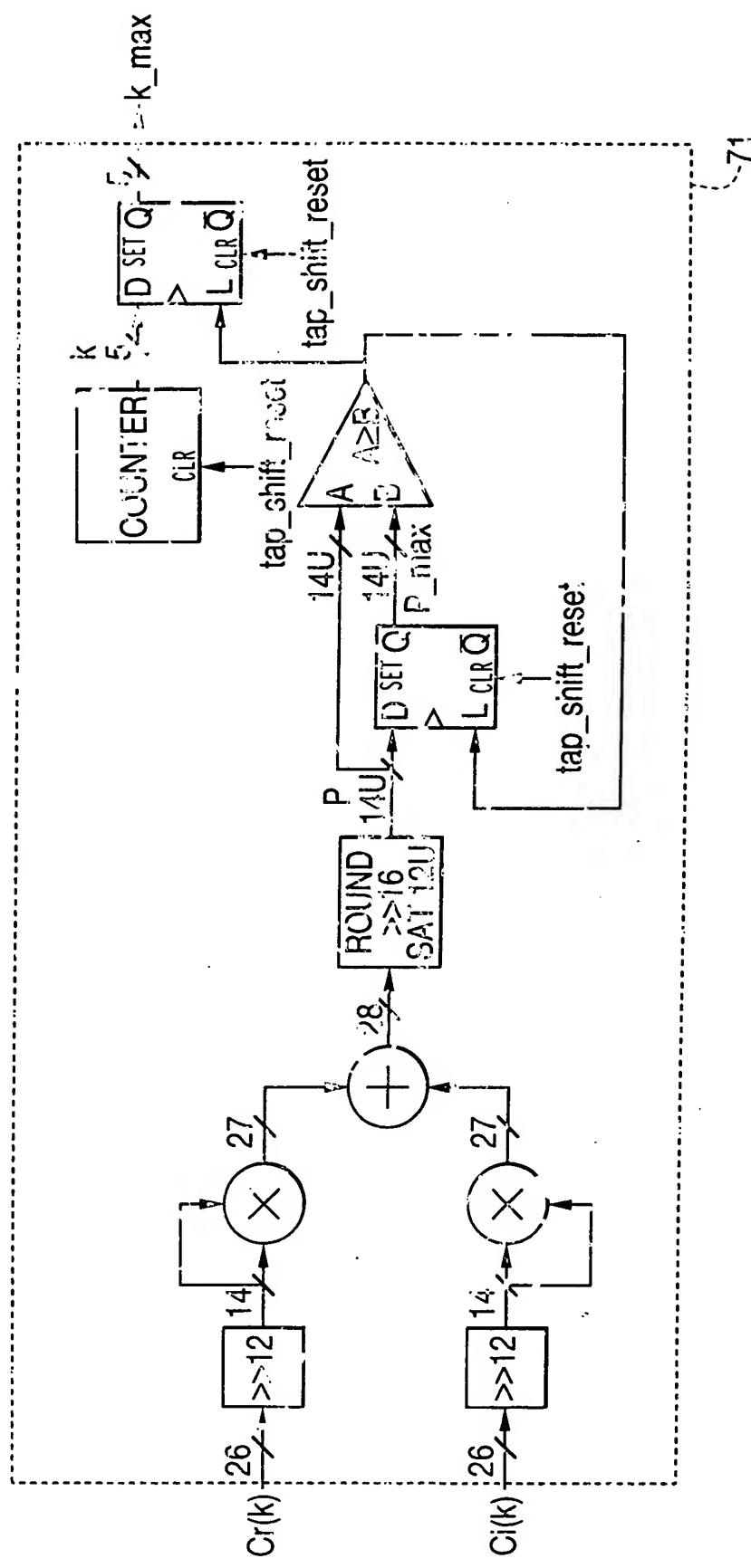


FIG. 7



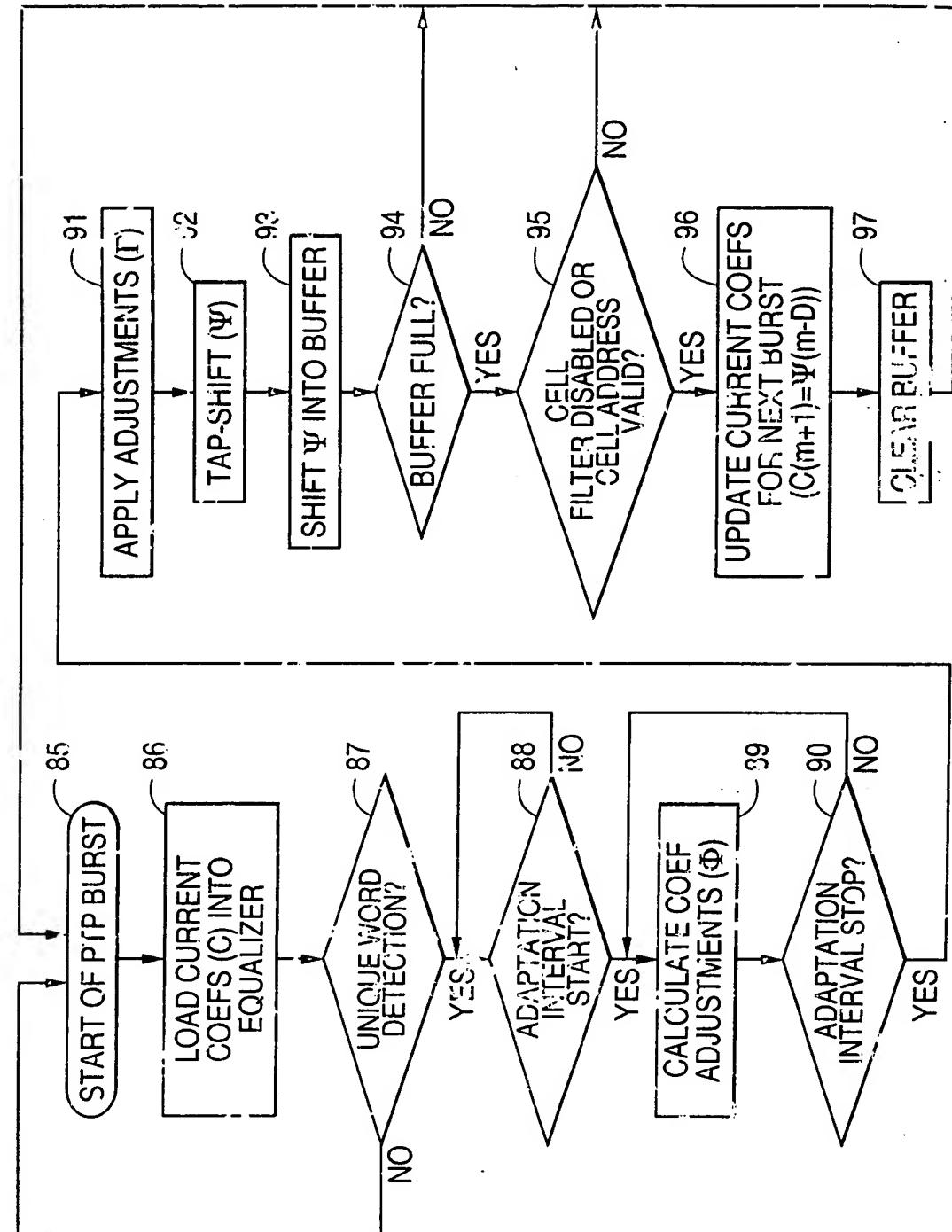


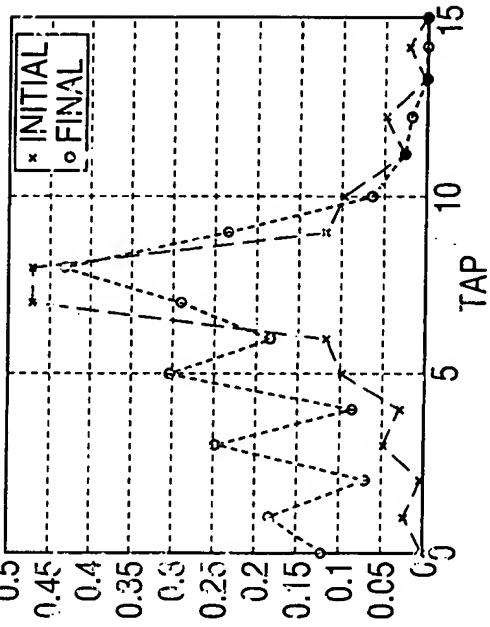
FIG. 9

**FIG. 10**

CURRENT FILTER COEF														
	C0	C0	C0	C1	C1	C1	C4	C4	C7	C7	C7	C11	C11	C14
CELL FILTER BUFFER [0]	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14
CELL FILTER BUFFER [1]	-C1	C2	-C4	C5	-C7	C8	-C10	C11	C12	-C14	C15	-C16	C17	-
CELL FILTER BUFFER [2]	-	C1	-	C4	-	C7	-	C10	C11	-	C14	-	-C16	-

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14
CELL FILTER BUFFER [0]	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14
CELL FILTER BUFFER [1]	-C1	C2	-C4	C5	-C7	C8	-C10	C11	C12	-C14	C15	-C16	C17	-
CELL FILTER BUFFER [2]	-	C1	-	C4	-	C7	-	C10	C11	-	C14	-	-C16	-

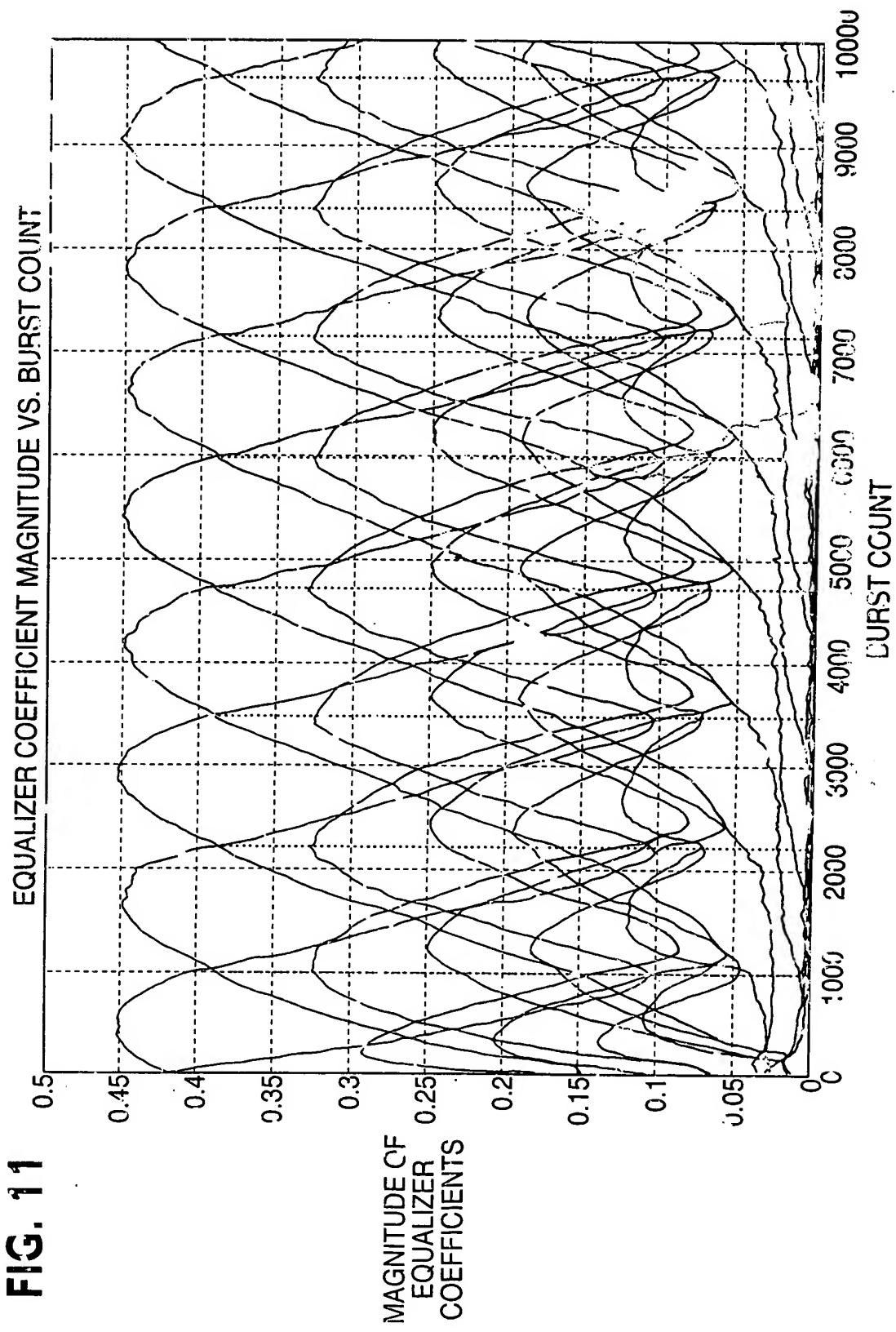
**FIG. 12** EQUALIZER COEFFICIENT MAGNITUDES



**FIG. 15**

	13° SCAN ANGLE	DEGRADATION (dB)
WITH MICROCELL ADDRESS VALIDATOR	1.0	
WITHOUT MICROCELL ADDRESS VALIDATOR		1.7

**FIG. 11**



CROSS SCAN ANGLE (DEG)

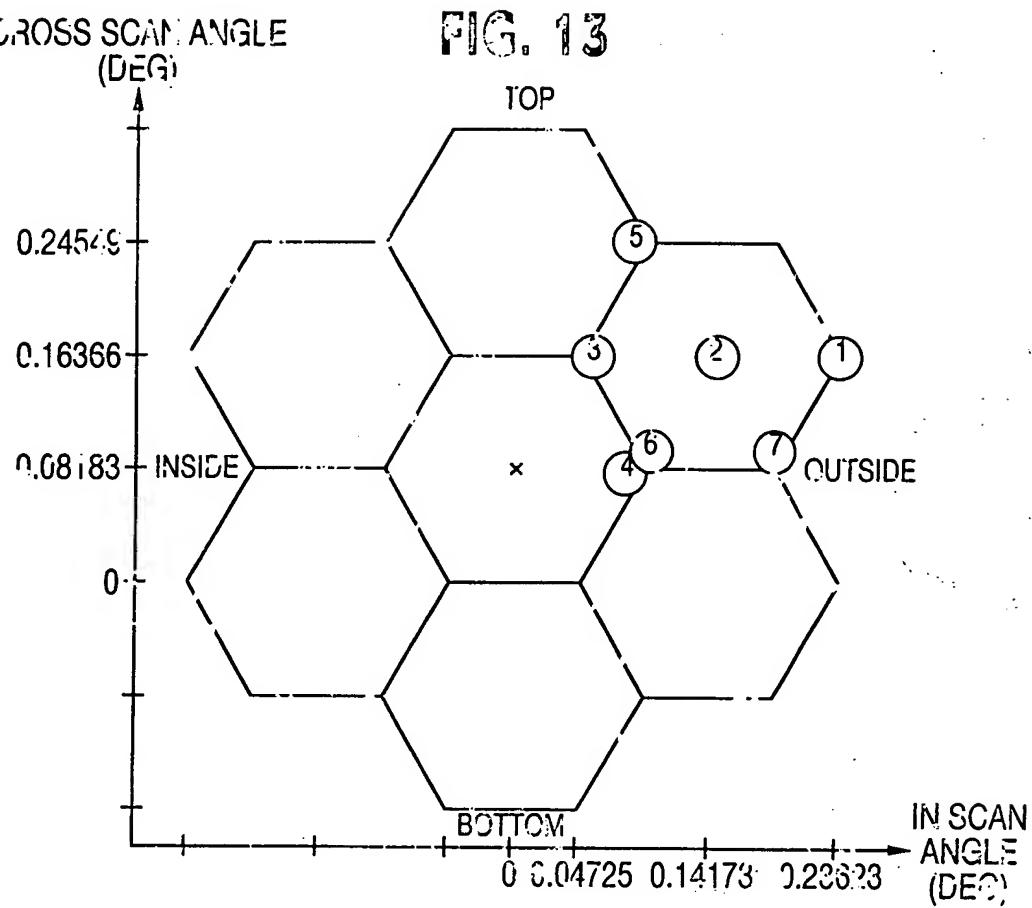


FIG. 14  
DIRECTIVITY RELATIVE TO BEAM PEAK AT MIDS AND FREQUENCY (dB)

